

Financial Market Infrastructure: Quantitative Disclosure

(Unit : Millions of yen)

Ref.No.	Principle 4 Credit Risk Disclosure Description		Frequency		Clearing Service		Comments	
			Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts		
4.1	Total value of default resources (excluding initial and retained variation margin)							
4.1.1	Prefunded Own Capital	Before	2018/9/28	2018/9/28	800	2,000		
4.1.2		Alongside			0	0		
4.1.3		After			0	0		
4.1.4	Prefunded Participant contributions	Required	3,113	6,057				
4.1.5		Posted	8,386	21,532				
4.1.6	Prefunded Other		0	0				
4.1.7	Committed Own/parent funds	Round of participant defaults	2018/9/28	2018/9/28	0	0		
4.1.8	Committed Participant	Initial round of participant default			0	0		
4.1.9	commitments	Replenish the default fund			unlimited	unlimited		
4.1.10	Committed Other				0	0		
4.2	KCCP							
4.2.1	Kccp - Kccp need only be reported by those CCPs which are, or seek to be a "qualifying CCP" under relevant law		2018/9/28	2018/9/28	132	0		
4.3	Value of pre-funded default resources (excluding initial and retained variation margin) held for each clearing service, in total and split by							
4.3.1	Cash	Cash deposited at a central bank of issue of the currency	Pre-Haircut	2018/9/28	2018/9/28	-	-	(4.3.3)"Secured cash deposited at commercial banks" refers to the cash deposited at ordinary deposit account or fixed deposit account in commercial bank, which does not incur any loss at the maturity.
4.3.2			Post-Haircut			-	-	
4.3.3		Cash deposited at other central banks	Pre-Haircut			-	-	
4.3.4			Post-Haircut			-	-	
4.3.5	Secured cash deposited at commercial banks	Pre-Haircut	3,675	17,717				
4.3.6		Post-Haircut	3,675	17,717				
4.3.7	Unsecured cash deposited at commercial banks	Pre-Haircut	0	0				
4.3.8		Post-Haircut	0	0				
4.3.9	Sovereign Government Bonds - Domestic	Pre-Haircut	2,228	5,312				
4.3.10		Post-Haircut	2,183	5,222				
4.3.11	Sovereign Government Bonds - Other	Pre-Haircut	-	-				
4.3.12		Post-Haircut	-	-				
4.3.13	Agency Bonds	Pre-Haircut	-	-				
4.3.14		Post-Haircut	-	-				
4.3.15	State/municipal bonds	Pre-Haircut	-	-				
4.3.16		Post-Haircut	-	-				
4.3.17	Corporate bonds	Pre-Haircut	-	-				
4.3.18		Post-Haircut	-	-				
4.3.19	Equities	Pre-Haircut	4,754	850				
4.3.20		Post-Haircut	3,327	593				
4.3.21	Commodities - Gold	Pre-Haircut	-	-				
4.3.22		Post-Haircut	-	-				
4.3.23	Commodities - Other	Pre-Haircut	-	-				
4.3.24		Post-Haircut	-	-				
4.3.25	Commodities - Mutual Funds/UCITs	Pre-Haircut	-	-				
4.3.26		Post-Haircut	-	-				
4.3.27	Commodities - Other	Pre-Haircut	-	-				
4.3.28		Post-Haircut	-	-				
4.3.29	In total	Pre-Haircut	10,657	23,879				
4.3.30		Post-Haircut	9,186	23,532				
4.4	Credit Risk Disclosures							
4.4.1	Whether the CCP is subject to a minimum "Cover1" or "Cover2" requirement in relation to total pre-funded default resources		2017/10/1	2018/9/28	4	3	(4.4.1) The number of expected defaulting members is defined as one Clearing Member that would potentially cause the largest credit risk to TFX and several Clearing Members with the lowest amount of net assets. Interest Rate Futures Contracts : 3 members / Daily Futures Contracts: 2 members (4.4.3~4.4.6, 4.4.7~4.4.10)The estimated largest aggregate stress loss (here in after "ELL") is calculated on the basis of the number of expected defaulting members TFX defines in 4.4.1	
4.4.2	The number of business days within which the CCP assumes it will close out default when calculating credit exposures that would potentially need to be covered by the default fund				1day	1day		
4.4.3	The estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions	Peak day amount in previous 12 months			3,598	9,753		
4.4.4		Average over previous 12 months			2,526	5,471		
4.4.5	The number of business days, if any, on which the above amount (4.4.3) exceeded actual pre-funded default resources				1	6		
4.4.6	The amount in 4.4.3 which exceeded actual pre-funded default resources				270	1,035		
4.4.7					-	1,010		
4.4.8					-	550		
4.4.9					-	520		
4.4.10					-	62		
4.4.11					-	26		
4.4.12					-	-		
4.4.13					-	-		
4.4.14					-	-		
4.4.15					-	-		
4.4.16	The actual largest aggregate credit exposure to any single participant and its affiliates				0	1,803		
4.4.17					0	755		
4.4.18	The estimated largest aggregate stress loss (in excess of initial margin) that would be caused by the default of any two participants and their affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions				-	-		
4.4.19					-	-		
4.4.20	The number of business days, if any, on which the above amount (4.4.3) exceeded actual pre-funded default resources				-	-		
4.4.21	The amount in 4.4.3 which exceeded actual pre-funded default resources				-	-		
4.4.22	The top five amount				-	-		
4.4.23					-	-		
4.4.24	The actual largest aggregate credit exposure to any two participants and their affiliates				-	-		
4.4.25					-	-		
4.4.26					-	-		

Ref.No.	Principle 5 Collateral Disclosure Description		Frequency		Clearing Service		Comments
			Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts	
5.1	Assets eligible as initial margin, and the respective haircuts applied						
5.1.1	Assets eligible, and the respective haircuts applied		-	-	https://www.tfx.co.jp/en/rules/pdf/a-09_en.pdf		(5.1.1)(5.2.1)10 years is the sample period for calculating haircut ratio since the disclosure document of 1Q 2018.
5.2	Assets Eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied (if different from 5.1)						
5.2.1	Pre-funded participant contributions to the default resources		-	-	https://www.tfx.co.jp/en/rules/pdf/b-18_en.pdf		
5.3	Results of testing of haircuts						
5.3.1	Confidence interval targeted through the calculation of haircut		2018/7/1	2018/9/28	100%	100%	
5.3.2	Assumed holding/liquidation period for the assets accepted				4days	4days	
5.3.3	Look-back period used for testing the haircuts				1year	1year	
5.3.4	The number of days during the look-back period on which the fall in value during the assumed holding/liquidation period exceeded the haircut on an asset				0day	1day	

Ref.No.	Principle 6 Margin Disclosure Description		Frequency		Clearing Service			Comments	
			Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts			
						FX	Equity Index		
6.1	For each clearing service, total initial margin required, split by house and client								
6.1.1	Total initial margin required	House Net	2018/9/28	2018/9/28	405	23,832	541	(6.1.1)"Total initial margin required" of TFX_FX and TFX_CFD includes the amount of variation margin.	
		Client Gross			-	67,565	7,039		
		Client Net			1,458	-	-		
		Total			1,863	91,397	7,580		
6.2	For each clearing service, total initial margin held, split by house and client								
6.2.1	Cash deposited at a central bank issue of the currency concerned	House	Pre Haircut	2018/9/28	2018/9/28	-	-	-	(6.1.1~6.2.15)Initial margin deposit for TFX_FX and TFX_CFD is deposited only by JPY cash.
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.2	Cash deposited at other central banks	House	Pre Haircut			-	-	-	(6.2.3)"Secured cash deposited at commercial bank" refers to the cash deposited at ordinary deposit account or fixed deposit account in commercial bank, and it does not incur any loss at the maturity.
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.3	Secured cash deposited at commercial bank	House	Pre Haircut			2,812	106,976	3,738	
		House	Post Haircut			2,812	106,976	3,738	
		Client	Pre Haircut			3,272	293,215	53,453	
		Client	Post Haircut			3,272	293,215	53,453	
		Total	Pre Haircut			6,084	400,191	57,191	
		Total	Post Haircut			6,084	400,191	57,191	
6.2.4	Unsecured cash deposited at commercial banks	House	Pre Haircut			-	-	-	
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.5	Sovereign government bonds - domestic	House	Pre Haircut			11,067	-	-	
		House	Post Haircut			10,854	-	-	
		Client	Pre Haircut			2,352	-	-	
		Client	Post Haircut			2,304	-	-	
		Total	Pre Haircut			13,419	-	-	
		Total	Post Haircut			13,158	-	-	
6.2.6	Sovereign government bonds - other	House	Pre Haircut			-	-	-	
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.7	Agency bonds	House	Pre Haircut			-	-	-	
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.8	State/municipal bonds	House	Pre Haircut			-	-	-	
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.9	Corporate bonds	House	Pre Haircut			-	-	-	
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.10	Equities	House	Pre Haircut			25,554	-	-	
		House	Post Haircut			17,885	-	-	
		Client	Pre Haircut			496	-	-	
		Client	Post Haircut			347	-	-	
		Total	Pre Haircut			26,050	-	-	
		Total	Post Haircut			18,232	-	-	
6.2.11	Commodities - Gold	House	Pre Haircut			-	-	-	
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.12	Commodities - Other	House	Pre Haircut			-	-	-	
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.13	Mutual funds / UCIT s	House	Pre Haircut			-	-	-	
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.14	Other	House	Pre Haircut			-	-	-	
		House	Post Haircut			-	-	-	
		Client	Pre Haircut			-	-	-	
		Client	Post Haircut			-	-	-	
		Total	Pre Haircut			-	-	-	
		Total	Post Haircut			-	-	-	
6.2.15	Total	House	Pre Haircut			39,433	106,976	3,738	
		House	Post Haircut			31,551	106,976	3,738	
		Client	Pre Haircut			6,120	293,215	53,453	
		Client	Post Haircut			5,922	293,215	53,453	
		Total	Pre Haircut			45,553	400,191	57,191	
		Total	Post Haircut			37,474	400,191	57,191	
6.3	For each clearing service, total initial margin held, split by house and client								
6.3.1	Initial margin rates on individual contracts where the CCP sets such rates	Interest Rate Futures Contracts		-	-	https://www.tfx.co.jp/en/historical/futures/spparam.html			
		FX Daily Futures Contracts	Individual Customers				https://www.click365.jp/en/start/start06_02.html		
			Non-individual Customers and Market Makers				https://www.click365.jp/en/start/start06.html		
		Equity Index Daily Futures Contracts				https://www.clickkabu365.jp/en/start/start05.html			

6.4 Type of initial margin model used (e.g. portfolio simulation or risk aggregation) for each clearing service and the key model design parameters for each initial margin model applied to that clearing service									
6.4.1	Type of IM model	Interest Rate Futures Contracts		-	-	SPAN@ method		(6.4.1)For Transactions by Individual Customers of FX Daily Futures contracts, TFX determines the Margin Reference Amount based on the maximum leverage ratio of 25 times as prescribed in the relevant laws and regulations. (6.4.5)Display error corrected on February 1, 2019 (*1)For Transactions by Individual Customers of FX Daily Futures contracts, TFX determines the Margin Reference Amount based on the maximum leverage ratio of 25 times as prescribed in the relevant laws and regulations. TFX has confirmed that the ratio fully covers confidence level of 99% or more in price movement data used in stress test with respect to at least three major currency pairs (USD/JPY, EUR/JPY, AUD/JPY). (*2)Since TFX adopted the Financial Resources Framework in July 2015, those parameters are reviewed once a year as part of the validation of overall risk management framework. (*3)Non-individual Customers and Market Makers	
		FX Daily Futures Contracts	Individual Customers			Fixed leverage ratio(x25) method			
Non-individual Customers	Historical volatility method								
Market Makers	Historical volatility method with the limit of maximum leverage ratio(x25)								
Equity Index Daily Futures Contracts	Customers	Historical volatility method with the limit of maximum leverage ratio(x25)							
	Market Makers	Historical volatility method							
6.4.2	Type of IM model change effective date	Customers				1996/4/8	2017/2/27		2018/2/19
		Market Makers				-	-		2018/1/26
6.4.3	IM model name					SPAN@	-		-
6.4.4	IM model name change effective date					-	-		-
6.4.5	Single-tailed confidence level targeted	Individual Customers				99%	(*1)	99%	
		Non-individual Customers and Market Makers					99%	99%	
6.4.6	Single-tailed confidence level change effective date					(*2)	(*2)	(*2)	
6.4.7	Sample/data look-back period for calibrating the model					6months	8weeks or 104weeks(*3)	24weeks	
6.4.8	Look back period change effective date					(*2)	(*2)	(*2)	
6.4.9	Adjustments or scalars or weighting, if any, applied to historical data					-	-	-	
6.4.10	Adjustments change effective date					(*2)	(*2)	(*2)	
6.4.11	Close-out/holding periods					1day	1day	1day	
6.4.12	Close-out/holding periods effective date					(*2)	(*2)	(*2)	
6.4.13	IM rates link	Interest Rate Futures Contracts				https://www.tfx.co.jp/en/historical/futures/spparam.html			
		FX Daily Futures Contracts	Individual Customers			https://www.click365.jp/en/start/start06_02.html			
			Non-individual Customers and Market Makers			https://www.click365.jp/en/start/start06.html			
		Equity Index Daily Futures Contracts				https://www.clickkabu365.jp/en/start/start05.html			
6.4.14	Frequency of parameter reviews					monthly	weekly	weekly	
6.4.15	Frequency of parameter reviews change effective date					(*2)	(*2)	(*2)	
6.5 Results of back-testing of initial margin. At a minimum, this should include, for each clearing service and each initial margin model applied to that clearing service									
6.5.1.1	Number of times over the past 12 months that margin coverage held against any account fell below the actual marked-to-market exposure of that member account - based on daily back-testing results		2017/10/1	2018/9/28		0	3	60	(Note)(6.5.4)Peak that margin coverage held against a clearing member fell below the actual marked-to-market exposure of that member account - based on daily back-testing results.
6.5.1.2	Frequency of daily back-testing result measurements					daily	daily	daily	
6.5.1.3	Time of daily back-testing result if measured once a day					17:00:00	6:00:00	6:00:00	
6.5.2	Number of observations					4,001	6,078	3,618	(Note)(6.5.5)Average that margin coverage held against a clearing member fell below the actual marked-to-market exposure of that member account - based on daily back-testing results.
6.5.3	Achieved coverage level					100.0%	100.0%	98.3%	
6.5.4	Where breaches of initial margin coverage have occurred, report on size of uncovered exposure; Peak size	Peak				0	16	2,015	
6.5.5	Where breaches of initial margin coverage have occurred, report on size of uncovered exposure; Average Size	Average				0	8	213	
6.6 Average Total Variation Margin Paid to the CCP by participants each business									
6.6.1	Average Total Variation Margin Paid to the CCP by participants each business		2018/7/1	2018/9/28		51	2,323	471	
6.7 Maximum total variation margin paid to the CCP on any given business day over the period									
6.7.1	Maximum total variation margin paid to the CCP on any given business day over the period		2018/7/1	2018/9/28		329	17,340	1,420	
6.8 Maximum aggregate initial margin call on any given business day over the period									
6.8.1	Maximum aggregate initial margin call on any given business day over the period		2018/7/1	2018/9/28		137	857	678	

(Unit : Millions of yen)

Ref.No.	Principle 7 Liquidity Risk Disclosure Description	Frequency		Clearing Service		Comments	
		Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts		
7.1	Liquidity Risk						
7.1.1	State whether the clearing service maintains sufficient liquid resources to 'Cover 1' or 'Cover 2'.	2018/9/28	2018/9/28	4	3	(7.1.1)The number of expected defaulting members is defined as one Clearing Member that would potentially cause the largest liquidity risk to TFX and several Clearing Members with the lowest amount of net assets.	
7.1.2	Size and composition of qualifying liquid resources for each clearing service	(a) Cash deposited at a central bank of issue of the currency concerned		0	0	Interest Rate Futures Contracts : 3members / Daily Futures Contracts : 2members. (7.1.4)"Secured cash deposited at commercial bank" refers to the cash deposited at ordinary deposit account or fixed deposit account in commercial bank, which does not incur any loss at the maturity. (7.1.7)The liquidity supply facilities are set with several commercial banks designated as the Settlement Banks and TFX can utilize the funds within the same day upon taking procedural steps provided in the applicable agreements.	
7.1.3		(b) Cash deposited at other central banks		0	0		
7.1.4		(c) Secured cash deposited at commercial banks (including reverse repo)			0		141,484
7.1.5		(d) Unsecured cash deposited at commercial banks			0		0
7.1.6		(e) secured committed lines of credit (ie those for which collateral/security will be provided by the CCP if drawn) including committed foreign exchange swaps and committed repos			0		0
7.1.7		(f) unsecured committed lines of credit (ie which the CCP may draw without providing collateral/security)			29,000		0
7.1.8		(g) highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements even in extreme but plausible market conditions			0		0
7.1.9		(h) other			0		0
7.1.10	State whether the CCP has routine access to central bank liquidity or facilities			None.			
7.1.11	Details regarding the schedule of payments or priority for allocating payments, if such exists, and any applicable rule, policy, procedure, and governance arrangement around such decision making.			https://www.tfx.co.jp/en/rules/pdf/a1a08_en.pdf			
7.2 Size and composition of any supplementary liquidity risk resources for each clearing service above those qualifying liquid resources above.							
7.2.1	Size and composition of any supplementary liquidity risk resources for each clearing service above those qualifying liquid resources in 7.1				4,252		

7.3 Liquidity Risk						
7.3.1	Estimated largest same-day and, where relevant, intraday and multiday payment obligation ("ELPO") in total that would be caused by the default of any single participant and its affiliates in extreme but plausible market conditions	SameDayPayment_Total	2017/10/1	2018/9/28	4,288	16,516
		SameDayPayment			4,288	16,516
		IntraDayPayment			-	-
		MultiDayPayment			-	-
7.3.2	Report the number of business days, if any, on which the above amount exceeded its qualifying liquid resources (identified as in 7.1, and available at the point the breach occurred), and by how much; No. of days in quarter				0	0
7.3.3	Number of business days, if any, on which the above amount exceeded its qualifying liquid resources (identified as in 7.1, and available at the point the breach occurred), and by how much; Amount of excess on each day				0	0
7.3.4	Actual largest intraday and multiday payment obligation of a single participant and its affiliates (including transactions cleared for indirect participants) over the past twelve months; Peak day amount in previous twelve months	SameDayPayment_Total			127	49,291
		SameDayPayment			127	49,291
		IntraDayPayment			-	-
		MultiDayPayment			-	-
7.3.5	Estimated largest same-day and, where relevant, intraday and multiday payment obligation in each relevant currency that would be caused by the default of any single participant and its affiliates (including transactions cleared for indirect participants) in extreme but plausible market conditions				-	-
7.3.6	Number of business days, if any, on which the above amounts exceeded its qualifying liquid resources in each relevant currency (as identified in 7.1 and available at the point the breach occurred), and by how much				-	-
7.3.7	Report the number of business days, if any, on which the above amounts exceeded its qualifying liquid resources in each relevant currency (as identified in 7.1 and available at the point the breach occurred), and by how much; Amount of excess on each day				-	-

Principle 13 Default rules and Procedures			Frequency		Clearing Service		Comments
Ref.No.	Disclosure Description	Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts		
13.1	Quantitative information related to defaults						
13.1.1	Quantitative information	Amount of loss versus amount of initial margin	2018/7/1	2018/9/28	-	-	
13.1.2	related to defaults	Amount of other financial resources used to cover losses			-	-	
13.1.3.		Proportion of client positions closed-out			-	-	
13.1.3.		Proportion of client positions ported			-	-	
13.1.4		Appropriate references to other published material related to the defaults			-	-	

Principle 14 Segregation and Portability			Frequency		Clearing Service		Comments
Ref.No.	Disclosure Description	Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts		
14.1	Total Client Positions held as a share of notional values cleared or of the settlement value of securities transactions						
14.1.1	Total Client Positions held in individually segregated accounts	2018/9/28	2018/9/28	0%	100%		
14.1.2	Total Client Positions held in omnibus client-only accounts, other than LSOC accounts			100%	0%		
14.1.3	Total Client Positions held in legally segregated but operationally comingled (LSOC) accounts			0%	0%		
14.1.4	Total Client Positions held in comingled house and client accounts			0%	0%		

(Unit : Millions of yen)

Principle 15 General Business Risk			Frequency		Clearing Service		Comments
Ref.No.	Disclosure Description	Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts		
15.1	General business risk						
15.1.1	Value of liquid net assets funded by equity	2017/4/1	2018/3/31		18,756		
15.1.2	Six months of current operating expenses				1,452(*4)		
15.2	General business risk; Financial Disclosures						
15.2.1	Total Revenue (Operating revenue)	2017/4/1	2018/3/31		6,691	(*5) Cash collateral is held on the balance sheet. Non-Cash collateral is held off the balance sheet.	
15.2.2	Total Expenditure (Operating expenditure)				6,747		
15.2.3	Profits				-56		
15.2.4	Total Assets				512,279		
15.2.5	Total Liabilities				490,839		
15.2.6	Explain if collateral posted by clearing participants is held on or off the CCP's balance sheet				(*5)		
15.2.7	Additional items as necessary				-		
15.3	General business risk; Income breakdown						
15.3.1	Percentage of total income that comes from fees related to provision of clearing services	2017/4/1	2018/3/31		87.72%	(15.3.1) Trading service fees include clearing service fees.	
15.3.2	Percentage of total income that comes from the reinvestment (or rehypothecation) of assets provided by clearing participants				2.50%		

(*4) Six months of current operating expenses after subtracting the following items.

1. The amount of depreciation expense.

2. The amount of incentive program fees (2,898 million yen). Trading service fees received from Market Maker include the incentive program fees (2,898million yen) to be passed through trading members. Both Total revenue and Total expenditure on the Financial Statements include the incentive program fees.

(Unit : Millions of yen)

Principle 16 Custody and Investment Risks			Frequency		Clearing Service		Comments
Ref.No.	Disclosure Description	Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts		
16.1	Total cash (but not securities) received from participants, regardless of the form in which it is held, deposited or invested, split by whether it was received as initial margin or default fund contribution						
16.1.1	Initial margin	2018/9/28	2018/9/28	6,084	457,382		
16.1.2	Default fund, received from participants			2,875	15,717		
16.2	How total cash received from participants (16.1) is held/deposited/invested, including;						
16.2.1	Percentage of this total participant cash held as cash deposits	2018/9/28	2018/9/28	100%	100%	(16.2.4)"Secured : as cash deposits at commercial banks" refers to the cash deposited at ordinary deposit account or fixed deposit account in commercial bank, which does not incur any loss at the maturity.	
16.2.2	Percentage held : as cash deposits at central banks of issue of the currency deposited			0%	0%		
16.2.3	Percentage held : as cash deposits at other central banks			0%	0%		
16.2.4	Percentage held : as cash deposits at commercial banks (Secured, including through reverse			100%	100%		
16.2.5	Percentage held : as cash deposits at commercial banks (Unsecured)			0%	0%		
16.2.6	Percentage held : as cash deposits in money market funds			0%	0%		
16.2.7	Percentage held : as cash deposits in other forms			0%	0%		
16.2.8	Percentage split by currency of these cash deposits			100%	100%		
16.2.9	Percentage held as cash deposits			100%	100%		
	Weighted average maturity of these cash deposits and money market funds			(*6)	0.39 years		
16.2.10	Percentage of total participant cash invested in securities; Domestic sovereign government			-	0%		
16.2.11	Percentage of total participant cash invested in securities; Other sovereign government bonds			-	-		
16.2.12	Percentage invested in : agency bonds			-	-		
16.2.13	Percentage invested in : state/municipal bonds			-	-		
16.2.14	Percentage invested in : other instruments			-	-		
16.2.15	Percentage split by currency of these securities			-	0%		
16.2.16	Weighted average maturity of these securities			-	-		
16.2.17	Estimate of the risk on the investment portfolio			-	-		
16.2.18	Investment policy sets a limit on the proportion of the investment portfolio that may be allocated to a single counterparty, and the size of that limit			-	-		
16.2.19	Number of times over the previous quarter in which this limit has been exceeded			-	-		
16.2.20	Percentage of total participant cash held as securities			0%	0%		
16.3	Rehypothecation of participant assets (ie non-cash)						
16.3.1	Total value of participant non-cash rehypothecated	Initial margin	2018/9/28	2018/9/28	-	-	(16.3) Participant assets are not rehypothecated by TFX.
16.3.2	Total value of participant non-cash rehypothecated	Default fund			-	-	
16.3.3	Maturities	Initial margin			-	-	
16.3.4	Maturities	Default fund			-	-	

Principle 17 Operational Risk			Frequency		Clearing Service		Comments
Ref.No.	Disclosure Description		Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts	
17.1	Operational availability target for the core system(s) involved in clearing (whether or not outsourced) over specified period for the system (e.g. 99.99% over a twelve-month period)						
17.1.1	Operational availability target for the core systems involved in clearing over specified period for the system		-	-	100%	100%	
17.2	Actual availability of the core system(s) over the previous twelve month period						
17.2.1	Actual availability of the core system(s) over the previous twelve month period		2017/10/1	2018/9/28	100%	100%	
17.3	Total number of failures						
17.3.1	Total number of failures and duration affecting the core system(s) involved in clearing over the previous twelve month period		2017/10/1	2018/9/28	0	0	
17.4	Recovery time objective(s)						
17.4.1	Recovery time objective(s) (e.g. within two hours)		-	-	2hours	2hours	

Principle 18 Access and Participation Requirements				Frequency		Clearing Service		Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts	
18.1	Number of clearing members, by clearing service							
18.1.1.1	Number of General clearing members			2018/9/28	2018/9/28	30	0	
18.1.1.2	Number of Direct clearing members					0	26	
18.1.1.3	Number of Others category					0	0	
18.1.2.1	Number of Central bank participants					0	0	
18.1.2.2	Number of CCP participants					0	0	
18.1.2.3	Number of Bank participants					13	4	
18.1.2.4	Number of Other participants					17	22	
18.1.3.1	Number of Domestic participants					29	24	
18.1.3.2	Number of Foreign participants					1	2	
18.2	Open Position Concentration							
18.2.1	Fewer than 25 members	Largest 5 members	Peak	2018/7/1	2018/9/28	-	-	
			Average			-	-	
18.2.2	25 or more members	Largest 5 members	Peak			69%	70%	
			Average			66%	69%	
18.2.3		Largest 10 members	Peak			92%	85%	
			Average			89%	84%	
18.3	Initial Margin Concentration							
18.3.1	Fewer than 25 members	Largest 5 members	Peak	2018/7/1	2018/9/28	-	-	
			Average			-	-	
18.3.2	25 or more members	Largest 5 members	Peak			67%	79%	
			Average			65%	78%	
18.3.3		Largest 10 members	Peak			88%	91%	
			Average			87%	90%	
18.4	Segregated Default Fund Concentration							
18.4.1	Fewer than 25 members	Largest 5 members	Quarter end	2018/9/28	2018/9/28	-	-	
18.4.2	25 or more members	Largest 5 members	Quarter end			41%	62%	
18.4.3		Largest 10 members	Quarter end			63%	85%	

Principle 19 Tiered Participation Arrangements				Frequency		Clearing Service		Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts	
19.1	Tiered participation arrangements, measures of concentration of client clearing							
19.1.1	Number of clients (accounts)			2018/7/1	2018/9/28	-	1,072,743	
19.1.2	Number of direct members that clear for clients					30	20	
19.1.3.1	Percent of client transactions	Attributable to the top five clearing members	Peak			100%	75%	
19.1.3.2			Average			94%	67%	
19.1.4.1		Attributable to the top ten clearing members	Peak			100%	93%	
19.1.4.2			Average			100%	91%	

(Unit : Millions of yen)

Principle 23 Disclosure of Rules, Key Procedures, and Market Data				Frequency		Clearing Service			Comments
Ref.No.	Disclosure Description			Start Date	End Date	Interest Rate Futures Contracts	Daily Futures Contracts		
							FX	Equity Index	
23.1	Disclosure of rules, key procedures, and market data; Average Daily Volumes								
23.1.1	Average daily volumes			2018/7/1	2018/9/28	5,993lots	127,007lots	17,861lots	
23.1.2	Average notional value of trades cleared					598,732	108,287	41,954	
23.2	Segregated Default Fund Concentration								
23.2.1	Gross notional outstanding/total settlement value of novated but not-yet settled securities transactions			2018/9/28	2018/9/28	13,593,641	1,476,206	595,149	
23.2.2	Asset class					Interest Rate	FX	Equity Index	
23.2.3	Product type					Futures/Option	Forex	CFD	
23.2.4	Product code					YEA	JNUSCFD	TFXJNKY	
		Bloomberg				0#JEY	0#TFXFX	TFX/CFD/INDEX	
		Reuters							
23.3	Disclosure of rules, key procedures, and market data; Execution Facility								
23.3.1	Average daily volumes submitted by Execution facility or matching/confirmation venue			2018/7/1	2018/9/28	5,993lots	127,007lots	17,861lots	
23.3.2	Notional contract values submitted by Execution facility or matching/confirmation venue					598,732	108,287	41,954	